ELLIOTT & ELLIOTT, P.A.

ATTORNEYS AT LAW

1508 Lady Street
COLUMBIA, SOUTH CAROLINA 29201
selliott@elliottlaw.us

SCOTT ELLIOTT

TELEPHONE (803) 771-0555 FACSIMILE (803) 771-8010

August 24, 2011

VIA ELECTRONIC FILING

Jocelyn Boyd, Esquire Chief Clerk and Administrator South Carolina Public Service Commission 101 Executive Center Drive Columbia, SC 29210

RE: Application of Carolina Water Service, Inc. for adjustment of Rates and

Charges and Modification of Certain Terms and Conditions for the Provision

of Water and Sewer Service DOCKET NO.: 2011-47-WS

Dear Ms. Boyd:

Enclosed please find the prefiled **Rebuttal Testimony of Patrick Flynn and Karen Sasic** filed on behalf of Carolina Water Service, Inc. in the above referenced docket. By copy of this letter, I am serving all parties of record.

If you have any questions or if I may provide you with any additional information, please do not hesitate to contact me.

Sincerely,

Elliott & Elliott, P.A.

Scott Elliott

SE/mlw Enclosures

cc: Parties of Record w/enc.

BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2011-47-WS

	IN RE	E: Application of Carolina Water Service, Incorporated for Approval of an Increase In its Rates for Water and Sewer Services Provided to All of Its Service Areas in South Carolina PATRICK FLYNN PATRICK FLYNN
1	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND YOUR
2		AFFILIATION WITH THE APPLICANT CAROLINA WATER SERVICER, INC.
3		("CAROLINA WATER").
4	A.	My name is Patrick C. Flynn. My business address is 200 Weathersfield Avenue,
5		Altamonte Springs, Florida 32714. I am the Regional Director at Utilities, Inc., for its
6		Southeast Region, which includes Carolina Water Service, Inc.
7		
8	Q.	ARE YOU THE SAME PATRICK FLYNN THAT HAS PREFILED DIRECT
9		TESTIMONY IN THIS CASE?
10	Α.	Yes, I am.
11		
12	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS
13		PROCEEDING?
14	A.	The purpose of my rebuttal testimony is to address certain questions raised by the
15		Office of Regulatory Staff witnesses.

1 Q. HAS CAROLINA WATER DETERMINED THE CAUSES OF ANY DELAYS IN 2 BILLINGS TO ITS CUSTOMERS?

A. Carolina Water has determined that delays associated with its receipt of bulk water supply bills from various suppliers of bulk water, which are issued in arrears, and the manual posting process associated with the pass-through to distribution-only customers of the charges levied under such bulk water supply bills, are the primary factors in the delayed billings to its customers.

Q.

A.

HAVE THE DELAYS IN RECEIVING BULK WATER GIVEN RISE TO ANY OTHER BILLING CONCERNS BY CAROLINA WATER'S CUSTOMERS?

Yes. The application of the current pass-through provision in Carolina Water Service's rate schedule can lead to large variances in customer bills during the course of a year due to disparities between the consumption period used to calculate customer bills and the consumption period associated with the cost of the bulk water supply bills being passed-through to customers.

Q.

WHICH OF CAROLINA WATER'S CUSTOMERS RECEIVE BULK WATER?

The Carolina Water systems which receive bulk water supply currently include
the systems set forth on Exhibit PCF-2, Purchased Water Systems in CAROLINA
WATER, attached hereto and incorporated herein by this reference.

Q. DOES CAROLINA WATER HAVE A PROPOSAL WHICH WOULD MINIMIZE THE DELAYS IN BILLING ITS CUSTOMERS SERVED WITH BULK WATER?

1 A. Yes. As a means of addressing the delayed billings to its customers resulting 2 from implementation of the pass-through provision of its current rate schedule, Carolina 3 Water would propose that, for customers served by Carolina Water systems that are supplied with bulk water, Carolina Water would no longer pass through to distribution-4 5 only customers a pro rata share of the bulk water supplier charges imposed on Carolina 6 Water that are reflected on bills issued in arrears and received by Carolina Water after the 7 consumption periods reflected on customer bills. Instead, Carolina Water would propose 8 that where a customer is served by a Carolina Water Service system that is supplied with 9 bulk water, beginning on the first day of the month following the effective date of the 10 Commission Order approving this proposal, Carolina Water may collect from the 11 customer a water supply charge that is based upon 115% of the effective price per 12 thousand gallons (or other unit of measure converted to thousands of gallons) for bulk 13 water established by Carolina Water bulk water suppliers, which would include any base 14 facilities charge imposed by its bulk water suppliers. Thereafter, Carolina Water would 15 be entitled to increase the water supply charge to reflect increases in bulk water prices or 16 base facility charges that may be adopted by a bulk water supplier. In no event would 17 Carolina Water charge or collect more than 115% of the effective price per thousand 18 gallons (or other unit of measure converted to thousands of gallons) established by 19 Carolina Water's bulk water suppliers nor would Carolina Water retroactively apply any 20 bulk water price increase or base facility charge increase that may be adopted by a bulk 21 water supplier.

Thereafter, the water supply charge for a Carolina Water system that is supplied with bulk water shall be reviewed annually by ORS to determine whether it recommends

22

that the 115% should be modified. Any proposed changes would be subject to Commission approval. The basis for the addition of 15% to the price of bulk water provided to Carolina Water by bulk water providers is to allow for a 15% non-account water (sometimes referred to as unaccounted for water) adjustment and adjustments for utility water use (i.e., flushing and plant usage), documented system leakage (i.e., documented unavoidable leaks and all recoverable leaks and breaks), and authorized water uses (permitted uses for public, fire system or non-customer allowable un-paid uses). Carolina Water shall provide ORS a quarterly report regarding non-account and authorized water usage.

A.

The amount of the monthly water supply charge collected from distribution-only customers shall be determined by multiplying the customer's metered water consumption by the bulk water supplier's effective price per thousand gallons of water pursuant to the above-described methodology.

Q. WHAT IS THE INDUSTRY STANDARD FOR NON-ACCOUNT WATER ADJUSTMENTS?

There is no specific non-account water adjustment standard in the water industry. The 15% adjustment reflects information taken from an article found in the 1976 Journal of the American Waterworks Association ("AWWA") entitled "Analysis of Unaccounted-for Water" (Exhibit AWWA UWL Analysis 1976), which has heretofore been recognized by the South Carolina Public Service Commission. The author, Charles W. Keller, states on page 162 of the article "that systems with distribution losses in the <10% range can be considered excellent with 10-20% losses in the reasonable range." Additionally, reference is made herein to the attached 2002 Survey of State Agency

Water Loss Reporting Practices (Exhibit AWWA State Survey 2002). The author of this survey, Janice A. Beecher, identified the wide range of acceptable water loss percentage goals that are evident in states and regulatory agencies across the country with the highest being 25% in Wisconsin for small water systems. The most common value is 15% that is noted in 10 states.

A.

Q. HAS THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION PREVIOUSLY ALLOWED A NON-ACCOUNT WATER ADJUSTMENT OF 15%?

Yes it has. In Docket No. 92-123-WS, Order No. 92-537, the Public Service Commission approved a contract for bulk water and sewer services between Carolina Water Service, Inc. and York County, dated January 28, 1992, in which the terms include a 15% allowance for non-account water use. There was no opposition to the approval of the contract entered into the docket.

Q.

A.

WHAT WILL BE THE METHOD OF DETERMINING THE PERCENTAGE OF NON-ACCOUNT WATER ADJUSTMENT?

Carolina Water will immediately begin to undertake a water audit of its systems, using the water audit methodology provided through AWWA, beginning with the I-20 system, which has the highest percentage of unaccounted for water. We estimate that the first audit will be completed by November 30. On a calendar year basis, CAROLINA WATER will conduct a water audit of each of the purchased water systems using the

1	water audit methodology provided through AWWA. The results of the annual audit will
2	be submitted to the ORS no later than February 15 of the following year.
3	
4 Q.	HOW WILL THE RESULTS OF THE WATER AUDIT BE USED?
5 A.	The annual water audit reports will identify whether any system's percentage of
6	non-account water adjustment is greater than 15%. If any are found to be in excess of
7	15%, CAROLINA WATER will develop a prudent, cost effective plan to address excess
8	non-account water loss within 90 days of completing the water audit subject to review
9	and approval by the Commission. Based on the 2002 Survey mentioned above, it may be
10	the case in some small systems where a higher percentage of water loss is acceptable
11	when compared to the cost to reduce the non-account water loss below 15%.
12	
13 Q.	WHAT IS THE RANGE OF CALCULATED NON-ACCOUNT WATER LOSS

WHAT IS THE RANGE OF CALCULATED NON-ACCOUNT WATER LOSS DURING THE TEST YEAR FOR THE PURCHASED WATER SYSTEMS?

A.

In the test year, the percentage water loss ranged from essentially zero in Westside Terrace to 19% in the I-20 system. With the exception of the I-20 system, the percentage loss was 11% or less.

Q. WHAT WILL BE THE FINANCIAL IMPACT TO CAROLINA WATER OF A NON-ACCOUNT WATER LOSS OF 15%?

A. Based on an analysis of the consumption data for each system, CAROLINA WATER would have lost \$64,000 in expenses not recovered from revenue using a

threshold of 15%. In other words, at 15%, it is to CAROLINA WATER' advantage to locate and cure the source of water loss, particularly in the I-20 system.

Q.

A.

WHAT ADDITIONAL ROLE DO YOU PROPOSE FOR THE ORS IN VERIFYING CAROLINA WATER'S BILLING UNDER YOUR PROPOSAL?

Carolina Water shall provide to ORS no later than February 15 of each year such billing information, invoices, and payments rendered relating to bulk water purchases as ORS deems necessary to conduct its review.

ORS shall complete its review, as to whether the 115% factor should be modified and report the results of the same to the Commission and Carolina Water Service no later than March 15 of each year. Subject to Commission review and approval Carolina Water Service shall thereafter be authorized to place the established water supply charge into effect for the next twelve-month period.

0.

WHAT ARE THE BENEFITS OF YOUR PROPOSAL TO CAROLINA WATER'S CUSTOMERS?

17 A. The billing process described hereinabove will obviate the need for Carolina
18 Water Service to await the issuance of bulk supplier bills and manually post the *pro rata*19 share of that bill to distribution-only customer accounts thereby minimizing the potential
20 for billing errors or confusion. It will provide customers with timely information
21 regarding water consumption. It will provide stability in the consumption rate from
22 month to month. The consumption rate would typically change only once per year.

1	Q.	WHAT ADDITIONAL STEPS IS CAROLINA WATER PREPARED TO TAKE
2		TO SIMPLIFY ITS BILLING FOR WATER PROVIDED BY BULK WATER
3		SUPPLIERS?

Notwithstanding the process I have proposed above, Carolina Water Service shall work cooperatively with the bulk suppliers to implement an electronic billing and payment process and shall report on its progress to ORS and the Commission no later than 60 days after the effective date of the Commission's Order adopting the proposed rates. This process will enable Carolina Water Service to issue bills to distribution-only customers based upon their current consumption and current system bulk water consumption.

A.

A.

12 Q. IF THE COMMISSION APPROVES YOUR PROPOSED RATE 13 MODIFICATION, HOW DOES CAROLINA WATER PROPOSE TO NOTIFY 14 ITS CUSTOMERS OF THE CHANGE IN RATES?

The Company agrees to notify all affected customers of this modification to the Company's rate schedule via separate mailing and to implement the modified rate schedule language in the next bill issued to such customers following the issuance of the Commission's Order approving this modification. The Company shall provide a draft of the notice to ORS and file a copy with the Commission prior to mailing.

- Q. HAVE YOU REVIEWED THE PRE-FILED TESTIMONY OF MS. SHARON
 SCOTT ON BEHALF OF ORS IN THIS MATTER?
- 23 A. Yes, I have reviewed her testimony.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A.

Q. DO YOU AGREE WITH HER ADJUSTMENT 29 – NON ALLOWABLE PLANT WHERE SHE PROPOSES A REDUCTION OF \$508,123?

No, I do not. In her testimony, she references the direct testimony of ORS witness Willie Morgan with regard to the details and description of the proposed adjustment. However, in reading through Mr. Morgan's testimony and accompanying exhibits, I find no reference to Ms. Scott's Adjustment 29. At the request of CAROLINA WATER, ORS produced a work paper labeled "Non-Allowable Plant Additions and Retirements Sample" that is referenced in Kirsten Weeks' rebuttal testimony. This document describes the proposed adjustments, which I reviewed. The fourteen accounting entries listed as items 8a-n identify a total of \$99,228 in expenditures associated with the engineering services provided by Burgin Engineering and Sims Group in designing improvements to the Lincolnshire wastewater treatment facilities. It is appropriate to include these expenditures in plant because they represent the prudent investment that was necessary in order to analyze the condition of the treatment facility at that time, to develop multiple plant improvement options, and to provide recommendations that would meet SC DHEC design requirements. The \$99,228 reflects the value of the engineering work that had to be done regardless of the timing of construction of the plant improvements themselves.

20

21

23

A.

Q. HAVE YOU REVIEWED THE PRE-FILED TESTIMONY OF MR. WILLIE J.

22 MORGAN ON BEHALF OF ORS IN THIS MATTER?

Yes, I have reviewed his testimony.

1

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A.

Q. DO YOU AGREE WITH MR. MORGAN'S TESTIMONY REGARDING HIS FINDINGS RELATED TO SEWER INFLOW AND INFILTRATION?

I agree with Mr. Morgan's testimony regarding the functionality of the CAROLINA WATER wastewater treatment facilities. With the exception of the Lincolnshire facility, flows treated at the eight other CAROLINA WATER plants are normal. However, I want to point out with respect to the Lincolnshire facility that significant progress has been made in reducing excess inflow and infiltration into the Lincolnshire collection system since 2006. Before that time, the impact of wet weather flow would be so great that the facility's flow meter indicated flow in excess of 400,000 gallons per day. Recent wet weather flow has been reduced to the range of 250,000 gallons per day. This improvement is the result of CAROLINA WATER making significant investments to locate, quantify, and correct collection system deficiencies. For example, in 2010, the portion of the collection system located in the Whitescreek subdivision was video inspected in its entirety. Following this inspection, approximately \$54,000 was spent in relining a 350-foot section of pipe that had collapsed. This relining project resulted in the elimination of a significant amount of infiltration, CAROLINA WATER believes conducting a feasibility study at this time would be duplicative of the work previously done and an imprudent use of resources.

20

21

22

Q. DO YOU AGREE WITH MR. MORGAN'S TESTIMONY REGARD CAROLINA WATER' REQUEST TO ESTABLISH OR MODIFY NON-RECURRING

CHARGES FOR DISCONNECTION, METER INSTALLATION, TAMPERING

AND PUMPING?

A.

No I do not. I will comment on each proposed charge individually.

Disconnection Charge for Sewer Service with Elder Valve Present

Contrary to the testimony of Mr. Morgan, CAROLINA WATER provided, in my response to Staff's Second Continuing Information Request, Item 2.3(b), a detailed description of the minimum costs incurred by CAROLINA WATER when disconnecting service when an elder valve is already installed (see attached Exhibit PCF-1, Misc. Charges). This minimum cost is \$35.00, which is reflected in the current tariff as a reconnection fee. However, it is appropriate to authorize a disconnection charge, at a premise with an elder valve already installed, in those instances where the imposition of a reconnection charge is not feasible, such as when a customer has vacated the premise or expresses intent to vacate the premise.

Disconnection Charge for Sewer Service with Elder Valve Not Present

In his testimony, Mr. Morgan states correctly that elder valves are not installed on all sewer service connections and opposes CAROLINA WATER' proposal to install elder valves at cost on those premises with delinquent accounts. It is important to also understand that elder valves are a critical component of the collection system in those systems where CAROLINA WATER provides only sewer service. An elder valve offers CAROLINA WATER a means of controlling the provision of sewer service to its paying customers in the same way that a lockable meter valve offers CAROLINA WATER the means to control the use of a water service. CAROLINA WATER proposes that the fraction of sewer customers who do not pay their bill, have not or are unwilling to make

payment arrangements, and have been given proper notice of CAROLINA WATER' intent to discontinue service, be obligated to pay the full one-time cost of installing an elder valve at their premises. In this way, the vast majority of the sewer customers who routinely pay their sewer bill will not suffer the impact of incrementally higher sewer rates due to the actions or inactions of the non-paying customers.

As described in my response to Item 2.3(b), there are numerous factors that contribute to the cost of an elder valve installation including: the presence and extent of underground and above ground conflicts such as driveways, sidewalks, trees, fences, and landscaping; the cost of restoration of the work area; and the cost of traffic control equipment and associated services. These are all bona fide expenses that together reflect the full cost of installing an elder valve on an individual basis long after a subdivision has been developed. Because of the variety of factors that impact the installation cost, it is impossible to accurately predict ahead of time what the actual cost will be for each premise. CAROLINA WATER suggests that the Commission recognize this fact and authorize CAROLINA WATER to charge the customer the full cost of an elder valve installation, not to exceed \$300, and with the requirement that CAROLINA WATER furnish the customer with an itemized copy of all costs incurred by CAROLINA WATER and its contractor.

Meter Installation Charge

Mr. Morgan's testimony regarding the lack of necessity for this charge incorrectly assumes that all new customers are situated in locations where a developer is present and able to furnish CAROLINA WATER with a meter. In actuality, property owners whose property is situated in close proximity to existing CAROLINA WATER water

distribution facilities but outside of a planned unit development ought to be required to pay CAROLINA WATER the one-time full cost of obtaining and placing the water meter, meter connectors, meter box, lid, and associated materials when service is requested. In this way, existing customers will not be impacted through the rate structure for costs incurred due to customer growth. In my response to Item 2.3(a), \$100 Meter Installation Charge, I itemized the total cost of installing a 5/8" x 3/4" meter as \$115 when installing a standard meter box and \$215 when a Ford meter box is installed. For purposes of clarification, CAROLINA WATER requests that the applicable language stated in Application Exhibit A.2.C be modified to state: "All meters 5/8 inches x 3/4 inches shall meet the Utility's standards. A one-time fee of \$115 shall be due upon installation using a standard meter box or \$215 when a Ford meter box is used."

The intent of requesting authorization to charge the actual cost to install larger meters reflects the benefit of insuring the installation of a high quality water meter that meets the minimum standards set by AWWA, is properly placed, and is likely to provide a long service life with accurate flow measurement. The current tariff does not provide any more clarity than what is proposed by CAROLINA WATER. As an alternative to authorizing CAROLINA WATER to collect the actual cost of installing larger meters, CAROLINA WATER would support the development of a set meter set fee that increases with meter size and reflects the current cost to purchase and install each size.

Tampering Charge

The intent of requesting authorization to levy a tampering charge is to establish a deterrent against willful acts by customers to damage or impair the operation of or access to a meter. In my view, a \$250 tampering charge will accomplish that objective with a

goal of not having to apply the charge at all. In contrast, the ORS proposes that CAROLINA WATER first prove "that a customer willfully damaged or tampered with CAROLINA WATER' equipment" (Mr. Morgan's testimony). I suggest that the proposed tampering charge be applicable only when imposing a service disconnect so as to avoid the implication that a tampering charge would be imposed unilaterally.

Pumping Charge

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

There are approximately 1,000 residential sewer customers in nine subdivisions in Lexington County whose plumbing includes the installation and operation of a holding tank and pump that is used to convey liquid wastewater from each residence to the nearest point of connection to the CAROLINA WATER collection system. The tanks are designed to retain solid waste in the same fashion that a septic tank functions but without the drain or leach field. Approximately 445 customers own the holding tank and pump with the remainder owned by CAROLINA WATER. Customers are obligated to pump out the holding tank at least once every five years with some customers choosing a more frequent maintenance cycle. The cost of the pump-out activity was initially set at \$150 many years ago. The cost has not changed since that time. In all cases, the cost is borne by the customer. However, over time, access to many of the tanks has become problematic and thereby increased the cost to accomplish the task. CAROLINA WATER incurs an average cost of approximately \$500 during normal business hours and at least \$750 for after-hours response by its contractors. As an alternative to the proposed charge of actual cost, CAROLINA WATER proposes that customers be made universally responsible for pumping out their tanks themselves using their preferred contractor.

Otherwise, CAROLINA WATER proposes that the current rate be revised to \$500 during normal business hours and \$750 for services rendered after hours.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

Q.

A.

1

2

DO YOU AGREE WITH MR. MORGAN'S TESTIMONY REGARDING HIS RECOMMENDATION TO HAVE CAROLINA WATER INSTALL METERS ON ALL BLOW-OFFS AND/OR FLUSHING LOCATIONS?

No. I do not. The primary purpose of a blow-off or flushing valve is to provide CAROLINA WATER with the means to maximize the velocity of the water moving through the water mains in order to scour minerals or sediment from the water main. By increasing the velocity above 2.5 feet per second, minerals and sediment become suspended in the water flow and then are carried out of system. The installation of a meter on each blowoff will have the effect of significantly reducing the water velocity by virtue of increasing resistance to the path taken by the water. Consequently, the flushing activity will take longer to achieve satisfactory results. There is a strong likelihood that the flushing effort will not be successful in improving water quality because of the decrease in velocity. The added time and expense associated with the use of the meters as well as the effort to secure the meters from unauthorized use will increase operational expense. The installation of meters at numerous locations throughout the twenty-one CAROLINA WATER water systems would be a significant capital investment because many of the blowoff valves or flushing hydrants would require the use of a two-inch meter at a cost in excess of \$300 per installation.

Q. IS IT CUSTOMARY IN THE WATER INDUSTRY TO QUANTIFY FLUSHING VOLUME USING METERS?

A. No, it is not. In my 32 years of experience in the water industry that includes detailed knowledge of over 200 water systems in four states, I have not come across any water system that utilizes meters to quantify water used in flushing activities.

A.

Q. HOW DOES CAROLINA WATER QUANTIFY AND DOCUMENT THE WATER USED FOR FLUSHING ACTIVITIES AND IS THIS CONSISTENT WITH THE METHODOLOGY UTILIZED IN IMPLEMENTING AN AWWA WATER AUDIT PROGRAM?

CAROLINA WATER calculates flushing volume by multiplying the flow rate in gallons per minute times the number of minutes of flushing activity. For a typical two-inch blowoff, the flow rate is assumed to be 250 gallons per minute at a nominal pressure of 60 psi. For smaller blowoff valves, a lower flow rate is used. The information is entered into a monthly flushing log by CAROLINA WATER staff for use in completing a water audit of the system. This methodology offers the most cost effective and efficient means of documenting flushing activity and in a manner that is consistent with AWWA's water audit methodology.

Q.

DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

Yes, it does.